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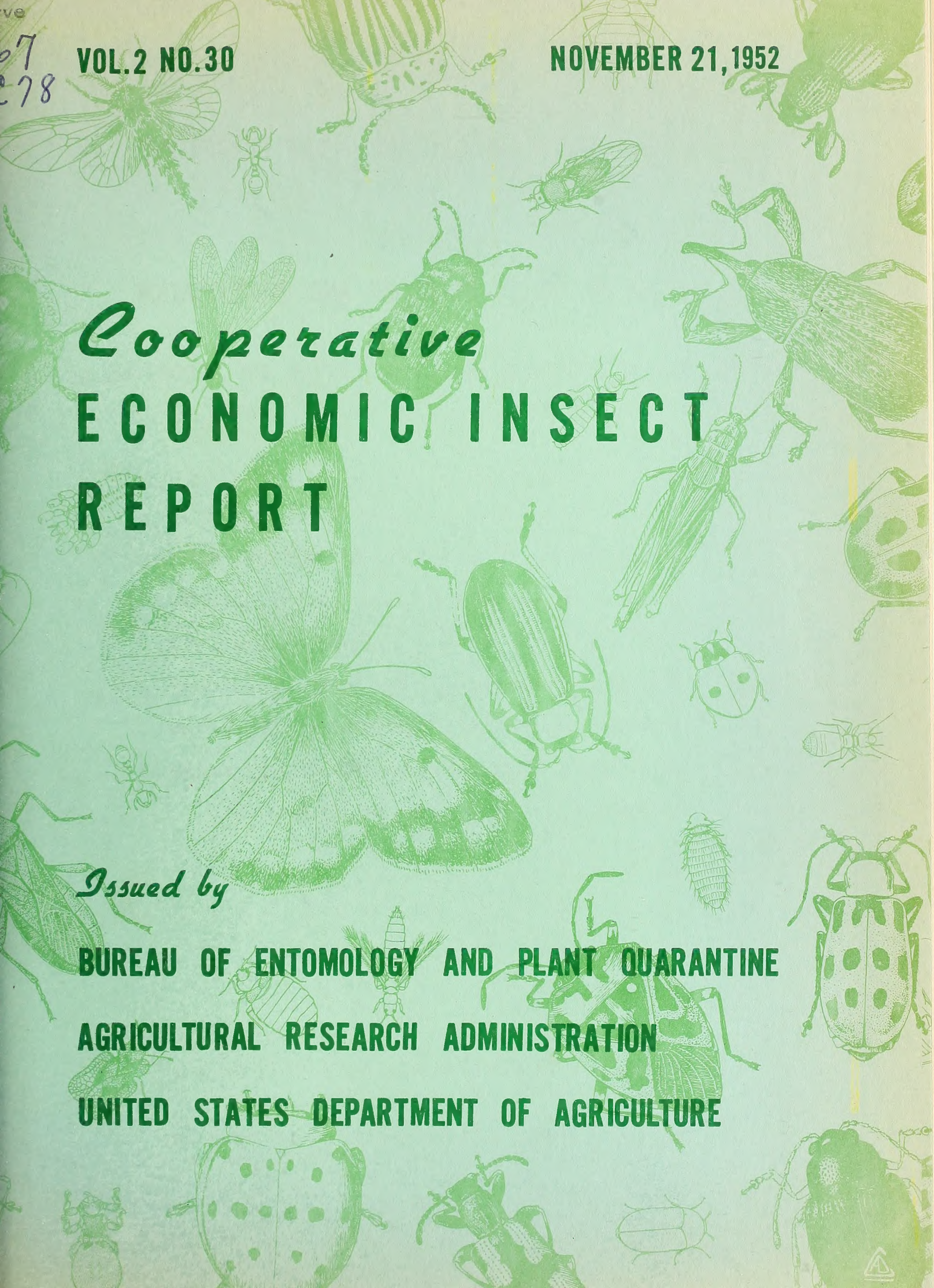

# *Cooperative* ECONOMIC INSECT REPORT

*Issued by*

BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE
AGRICULTURAL RESEARCH ADMINISTRATION
UNITED STATES DEPARTMENT OF AGRICULTURE

# BUREAU OF ENTOMOLOGY AND PLANT QUARANTINE

## DIVISION OF INSECT DETECTION AND IDENTIFICATION

### SECTION OF ECONOMIC INSECT DETECTION AND REPORTING

The Cooperative Economic Insect Report is issued weekly as a service to American Agriculture. Its contents are compiled from information supplied by cooperating State, Federal, and industrial entomologists and other agricultural workers. In releasing this material the Bureau serves as a clearing house and does not assume responsibility for accuracy of the material.

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Section of Economic Insect Detection and Reporting
Bureau of Entomology and Plant Quarantine
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Volume 2 November 21, 1952 No. 30

# COOPERATIVE ECONOMIC INSECT REPORT

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Reports in this issue are for the week ending November 15 unless otherwise designated.

## WEATHER FOR THE WEEK ENDING NOVEMBER 18, 1952

General precipitation in the far West for the first time in many weeks benefited small grains, ended the fire hazard, and to a limited extent replenished failing water supplies that had developed in some sections. Continuous light to moderate precipitation in the Pacific Northwest during the first half of the week and moderate to heavy amounts in the Southwest over the week end, produced over 2 inches of moisture in most coastal areas and inland to the Sierra Nevada Mountains in California, from one-half to over an inch eastward to the Continental Divide except generally less than one-half inch in the central and southern Plateau. Heavy snows fell in the northern portions of the Sierra Nevada Ranges and in the Rocky Mountain Ranges. Some lowlands in western Montana are snowcovered. Precipitation was generally very light in the western portions of the Great Plains, although heavy in most eastern portions. More than an inch of moisture fell in a belt extending northeastward from eastern Texas to the Lake region. Osceola, Iowa reported 6 inches of rain in 24 hours. At the end of the period little or no rain had fallen in the central Gulf areas and only very light amounts northward to the Great Lakes. In the Atlantic Coastal States weekly totals ranged up to a quarter of an inch in extreme northern and southern portions to slightly over an inch in middle sections.

Temperatures averaged slightly below normal for the week west of the Continental Divide, but much above in the remainder of the country. Rising temperatures, after the 10th in the Great Plains and the 11th in the East, reached record levels at many stations in the central interior on the 16th and 17th. On the 16th Keokuk, Iowa recorded 77°, Evansville, Indiana 78°, and Memphis, Tennessee 80°. Average departures for the week ranged up to 16° above normal in the Iowa-Missouri-Illinois area.

Drought: General precipitation either ended or greatly alleviated the drought in the far West, the eastern portion of the Great Plains, and the central and upper portions of the Mississippi Valley. But soil moisture is still inadequate, especially for fall grains, in the western portions of the Great Plains and in most of the South and East. Streams and wells remain low in the Northeast and water hauling continues in parts of Pennsylvania and Ohio. In the State of Washington precipitation was not sufficient to relieve the hydroelectric power shortage. (Summary Supplied by U. S. Weather Bureau).

## CEREAL AND FORAGE INSECTS

GREEN JUNE BEETLE (Cotinis nitida) -- SOUTH CAROLINA - Larvae causing considerable damage to winter cover crops on several farms in Florence and Darlington Counties. Grubs uprooting young plants thereby reducing stands. Cover crops in fields formerly used as pasture for cattle. (Hopkins, Creighton, Allen, November 8)

GREENBUG (Toxoptera graminum) -- SOUTH CAROLINA - Populations apparently increasing on grain in Charleston area, some older plantings show considerable damage in spots. (Reid, Cuthbert, Deen)

LESSER CORNSTALK BORER (Elasmopalpus lignosellus) -- KANSAS - Larvae found damaging crown and roots of newly seeded alfalfa in Harper County determined as this species. (D. E. Gates, October 13)

LUPINE MAGGOT (Hylemya lupini ) -- FLORIDA - Peak of egg laying during week of November 2-8, declined sharply beginning November 10. About 90 percent of plants in experimental lupine planting infested with 1 or more larvae. Pupation of first-generation flies starting. (F. E. Guthrie, No. Fla. Expt. Sta.)

FIELD CRICKET (Acheta assimilis) -- CALIFORNIA - Serious infestation on ranch 10 miles west of Gridley reported by F. Platt October 15. Crickets averaged between 15 and 30 per square yard and damage most severe on ears of corn on ground. This large population is unusual. H. H. Keifer)

## TRUCK CROP INSECTS

CABBAGE CATERPILLARS -- SOUTH CAROLINA - Cabbage looper (Trichoplusia ni) continues to cause moderate injury to cabbage and collards where insecticides inadequately applied in Charleston area. (Reid, Cuthbert, Deen) FLORIDA - Cabbage looper and imported cabbageworm (Pieris rapae) infestations in cabbage and collards continue moderately heavy in Gadsden and adjacent counties. (L. M. May).

APHIDS (Aphidae) -- VIRGINIA - Light to moderate infestations of cabbage aphid (Brevicoryne brassicae), turnip aphid (Rhopalosiphum pseudobrassicae), and green peach aphid (Myzus persicae) continue on crucifers in Norfolk area. Intensity of infestations dependant on adequacy of insecticide applications. (Brubaker, Greenwood, Hofmaster) SOUTH CAROLINA - Moderate green peach aphid infestations on turnips and kale, lighter on cabbage, Charleston area. Turnip aphid moderately abundant on turnips grown for greens. A few small colonies of cabbage aphid observed in one cabbage field. (Reid, Cuthbert, Deen) FLORIDA - Aphid populations increasing on turnips in Gadsden and adjacent counties. Collards carried over in gardens throughout summer have heavy infestations of cabbage aphid. (L. M. May)

VEGETABLE WEEVIL (Listroderes costirostris obliquus) -- SOUTH CAROLINA - Adults moderately abundant on turnip near edges of field, some small larvae also present. (Reid, Cuthbert, Deen)

GREENHOUSE LEAF TIER (Phlyctaenia rubigalis) -- CALIFORNIA - Unusual abundance in Yolo and Solano Counties area during October. Large numbers of adults observed over highway after dark, especially in vicinity of alfalfa fields. This moth has not been very abundant and is often difficult to find. (H. H. Keifer)

## COTTON INSECTS

PINK BOLLWORM (Pectinophora gossypiella) -- Of the 45 counties in east and northeast TEXAS outside the January 1, 1952 regulated area, 37 have been found newly infested this year. Some 25 inspectors are now making examinations in the cotton fields to determine actual infested fields in this area. Several of the counties do not have gins. In other counties in which gins are still operating, gin trash inspection and field inspection are being coordinated. (L. F. Curl)

Additional newly infested counties: Texas - Castro in the Panhandle, Hardin in East Texas; Oklahoma - Custer, Canadian, and Garvin. These counties are adjacent to counties previously infested.

HIBERNATING BOLL WEEVIL POPULATION IN MADISON PARISH, LOUISIANA -- Two hundred surface or ground trash samples were collected in Madison Parish from November 3 to 12, inclusive, and examined for boll weevils. An average of 1,295 live boll weevils per acre was found in the samples, as compared to 1,367 live weevils found in fall examinations in 1951 and 4,586 in 1950. The number of live weevils found in 1952 may also be compared with 2,226 which was the average number found per acre of ground trash during the past 16 years, 1936 to 1951, inclusive. In 12 of those years a greater number was found than in 1952 and in 4 years (1937, 1938, 1940, and 1947) a smaller number was found. Temperatures were considerably below normal in October. All cotton in Madison Parish had been killed before the end of the month. Temperature fell below 32° F. on 10 days and the minimum for the month was 22° F. on October 29 and 30. (R. C. Gaines).

A TORTRICID (Platynota stultana (Wlsm.)) -- ARIZONA - Thirty-one larvae and 7 pupae determined as this species collected from cotton near Buckeye, Maricopa County by W. A. Stevenson and L. W. Sheets September 30. Stevenson reported that the larvae were definitely causing some commercial damage in localized areas. Feeding in terminals, on bracts, and externally on squares and small bolls caused much shedding. Due to the protective habit of rolling into the bracts and to rapid reproduction, these insects are difficult to control. Insecticidal control is effective, however, where the worms are exposed. This widely distributed tortricid has many host plants and has been reported occasionally as a pest of cotton. (R. W. Harned).

## INSECTS AFFECTING MAN AND ANIMALS

SCREW-WORM (Callitroga americana) -- GEORGIA - An infestation in the nose of a woman at Ocilla, was reported by P. G. Geiger October 9. F. W. Lucas, M.D., reported that 115 larvae were removed from the right nostril on October 4 and several days following. The physician stated that the middle and superior turbinate have been almost completely destroyed and there is a 6 by 8 mm. perforation in the soft palate. The patient remembers that a large blue fly flew up her right nostril on or about September 25. Bleeding from the right nostril and pain in and around the right eye began September 30. Dr. Lucas states that he has had three other patients with similar nasal infestations during the last three years and one patient with infestation of the ear canal. (C. R. Jordan).

## SUMMARY OF INSECT CONDITIONS

MICHIGAN -- As reported by R. Hutson -- Insect populations in the State were about normal and included the usual species occurring during early summer. Limited outbreaks of strawberry root weevil (*Brachyrhinus* sp.), forest tent caterpillar (*Malacosoma disstria*), armyworm (*Pseudaletia unipuncta*), spinach flea beetle (*Disonycha xanthomelas*), and chinch bug (*Blissus leucopterus*) were recorded. Meadow spittlebug (*Philaenus leucophthalmus*), tarnished plant bug (*Lygus oblineatus*), asparagus beetle (*Crioceris asparagi*), spruce budworm (*Choristoneura fumiferana*), walkingstick (*Diapheromera femorata*), and boxelder bug (*Leptocoris trivittatus*) were fairly abundant.

Early-season indications of the possibility of widespread heavy infestation of red tart cherries by destructive prune worm (*Mineola scitulella*) did not materialize. The same can be said of red-banded leaf roller (*Argyrotaenia velutinana*), cranberry fruitworm (*Mineola vaccinii*), clover mite (*Bryobia praetiosa*), greenbug (*Toxoptera graminum*) on oats, corn earworm (*Heliothis armigera*), and blueberry maggot (*Rhagoletis pomonella*) on blueberries.

Plum curculio (*Conotrachelus nenuphar*), apple maggot (*Rhagoletis pomonella*) on apple, and Mexican bean beetle (*Epilachna varivestis*) on bean were more destructive than for many years.

Tomato russet mite (*Vasates destructor*) was found in field tomatoes for the first time this year. Apparently infested plants were brought into the State and transplanted.

Generally warm, dry conditions during August, September, and October seem to assure a heavy carry-over of plum curculio and Mexican bean beetle.

## INSECTS AFFECTING MAN AND ANIMALS - Additional report

IMPORTED FIRE ANT (*Solenopsis saevissima* v. *richteri*) -- LOUISIANA - Infestations found for first time in Reserve, St. John the Baptist Parish and New Roads, Pointe Coupee Parish. (G. H. Culpepper).

The following announcement was released November 5, 1952 by Frank A. Soraci, Chief, Bureau of Entomology, New Jersey Department of Agriculture.

"To the Plant Quarantine Officials: Please be notified that a viable cyst of golden nematode (Heterodera rostochiensis) was recovered from a sample of soil taken from a 7-1/2 acre farm near Matawan, New Jersey, on October 21, 1952. The farm is located near the Atlantic Coast outside the commercial potato and tomato growing areas of New Jersey.

Inspection and sampling of the soil on this farm occurred when it was found that waste material from a nearby mill which was processing imported used agricultural burlap, had been obtained by the farmer for incorporation into his soil. The mill, Allen Industries, Inc., Rahway, New Jersey, manufacturers rug mats. The waste material has been obtained by only one other farm in New Jersey. This is the State Prison Farm located at Rahway. Sampling of soil at that farm has so far proved negative.

It is our understanding that the Bureau of Entomology and Plant Quarantine will advise the other states of similar mills located within their boundaries that have been using imported burlap of this kind.

Quarantine restrictions will be placed against movement of any plants, soil or equipment from these two farms. Heavy fumigations with DD will be applied to the lands at the proper time in the Spring of 1953. Every effort will be made to eradicate the pest in New Jersey."

## BENEFICIAL INSECTS

A LARVAEVORID (Tachinid) FLY (Trichopoda pennipes) -- FLORIDA - Percentage of parasitism of southern green stink bug (Nezara viridula) extremely low in northwestern area reports F. J. Simmonds, British entomologist, who is collecting the stink bugs to obtain the parasite for shipment to Australia. (L. M. May)

## SURVEY METHODS

### PEA WEEVIL (Bruchus pisorum)

Since pea weevil populations in infested pea fields are most often concentrated in a narrow zone around the edges, especially in larger fields, it is frequently unnecessary to apply control measures to the entire planting. Parts of the field that require dusting may be determined quickly and accurately by making adult counts through use of a 15-inch net. Sweepings are made soon after the first blossoms appear and before controls are applied. The inspector goes into the field in several places on each of the four sides or at intervals in an irregularly shaped field. Two or more 25-sweep collections are made at each selected location (beginning at edge of field or 100 feet inside the margin), with strokes across the upper parts of the vines spaced at one or two paces. As each collection is completed, weevils are counted and number and location recorded on a rough diagram of the field. Inspection progresses at 100 feet intervals toward the center of the planting until no weevils are found. In peas grown for seed, survey is made toward center of the field to the point where weevil number falls below the economic level.

Due to influences such as weather and time of season, it is impossible to accurately establish an expected infestation rating resulting from a given number of weevils, as determined by sweeping, in an average field of peas. Weather has an important effect on both yield and weevil activity. The same number of weevils produce a greater infestation in late varieties than in early varieties. A population of 5 weevils per 50 sweeps may cause infestation at the canning stage of 1 to 2 percent in early varieties, whereas the same population may cause infestation at the same stage of 10 to 25 percent in varieties blooming after June 15. An infestation of 1 weevil in 25 sweeps on the growing plants at time of blooming causes from 3 to 8 percent infestation in peas harvested for seed.

In making this survey particular attention is given to areas in the field most likely to be severely infested including borders adjacent to wooded or brushy areas, buildings, ravines, gullies or any area where the first peas blossomed. After the initial inspection, fields are rechecked 18 to 24 hours after dusting to determine the effectiveness of the control operation. (The Pea Weevil and Methods for Its Control, Farmers' Bul. No. 1971, U.S.D.A.)